REMARKS[1]

Claims 1, 3-38, and 40-81 remain pending in this application. Claims 1 and 38

are independent. Claims 3-37 depend from claim 1, and claims 40-81 depend from

claim 38.

In the final Office Action of August 6, 2007, the non-final Office Action of March

19, 2008, and the outstanding final Office Action, the Examiner made the same

rejections, all under 35 U.S.C. § 103(a), as follows:

> I.   claims 1-5, 10-13, 15-17, 20, 21, 27, 38-42, 46-50, 52-54,
> 57, 58, 62, and 74-81 are rejected as unpatentable over Murphy et al.
> (U.S. Patent No. 6,226,744) in view of Ishibashi et al. (U.S. Patent
> Publication No. 2004/0006695);[2]
>
> II.   claims 6, 9, 18, 22, 23, 43, 51, 55, 59, 60, and 66 are
> rejected as unpatentable over Murphy et al. in view of Ishibashi et al., and
> further in view of de Jong et al. (U.S. Patent No. 7,085,840);
>
> III.   claims 7, 8, 44, and 45 are rejected as unpatentable over
> Murphy et al. in view of Ishibashi et al. and de Jong et al., and in further
> view of Chang et al. (U.S. Patent No. 6,715,082) and Yu et al. (U.S.
> Patent No. 6,067,621);
>
> IV.   claims 19, 24, 26, 56, and 61 are rejected as unpatentable
> over Murphy et al. in view of Ishibashi et al., and further in view of Teicher
> et al. (U.S. Patent No. 6,257,486);
>
> V.   claims 25, 36, 37, 72, and 73 are rejected as unpatentable
> over Murphy et al. in view of Ishibashi et al., and further in view of Geer,
> Jr. et al. (U.S. Patent No. 6,192,131);
>
> VI.   claims 28-31, 34, 63-65, 67, and 68 are rejected as
> unpatentable over Murphy et al. in view of Ishibashi et al., de Jong et al.,
> Chang et al., and Yu et al., and further in view of Baird, III et al. (U.S.
> Patent No. 6.732,278); and

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[1] The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

[2] Applicant notes that claim 2 was cancelled by amendment on May 4, 2007. Therefore, the rejection of claim 2 is moot.

VII.   claims 32, 33, 35, and 69-71 as are rejected as unpatentable over Murphy et al. in view of Ishibashi et al., de Jong et al., Chang et al., Yu et al., and Baird, III et al., and further in view of Teppler (U.S. Patent No. 6,792,536).

In response to each of the previous Office Actions, Applicant argued that these rejections are improper because the Examiner failed to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a).

In particular, with regard to the rejection of independent claims 1 and 38 as unpatentable over Murphy et al. and Ishibashi et al., Applicant pointed out that Murphy et al. fails to teach or suggest at least a PAD comprising "at least one storage medium storing at least one CA public key, . . . [and] a processing component for authenticating [] one or more received digital certificates using the at least one stored CA public key," as required by independent claim 1. See Request for Reconsideration of January 4, 2008, at 3-5, and Request for Reconsideration of May 30, 2008, at 3-7. Murphy et al. teaches away from the claimed elements, because Murphy et al. teaches an authentication process that does not require the use of a public key of a CA. Consequently, it is unnecessary to store a CA public key on the PAD. See Request for Reconsideration of May 30, 2008, at 4, 6.

Applicant further pointed out that the secondary reference, Ishibashi et al., fails to cure the deficiencies of Murphy et al. See Request for Reconsideration of November 5, 2007, at 5-7, and Request for Reconsideration of May 30, 2008, at 6-7.

The Examiner notes that Ishibashi et al. was combined with Murphy et al. "to teach that the smartcard can include a ticket generate program." Final Office Action, at 3. Thus, the Examiner does not seem to dispute that Ishibashi et al. also fails to teach

or suggest the above-quoted elements of claim 1, which Applicant submits is missing from Murphy et al.

It then appears that the Examiner and Applicant disagree as to 1) whether the smart card of Murphy et al., allegedly corresponding to Applicant's claimed PAD, stores the public key of a CA, and 2) whether the smart card of Murphy et al. authenticates digital certificates using a stored CA public key.

With regard to the first disagreement, the Examiner alleged that Murphy et al. teaches storing the public key of a CA on the smart card, because the smart card stores public and private RSA cryptographic key pairs. Final Office Action, at 3. The Examiner noted "storing public and private RSA cryptographic key pairs is interpreted to include a CA public key." Id. at 3.

Applicant respectfully points out that RSA cryptographic keys are generally used to encrypt and decrypt communications. Furthermore, a certificate authority (CA), when needed, merely attests to the authenticity of the RSA keys of a communication entity. Applicant is not aware of any rationale why storing the RSA keys on a smart card requires storing a public key of a CA. A CA is not always needed, and the public key of a CA is even less often required. This point is clear especially in light of the teachings of Murphy et al. Specifically, as Applicant previously explained, the authentication process taught in Murphy et al. takes place over the network by comparing the same set of information stored on the smart card and on the database on the network, and does not require a public key of the CA. Murphy et al., 5:66-6:40, and Figure 1; Request for Reconsideration of May 30, 2008, at 3-4.

If the Examiner maintains the position that storing RSA keys necessarily means storing the public key of a CA, Applicant respectfully requests that the Examiner provide evidentiary support for such allegations. See MPEP § 2144.03. Applicant also notes that the Office should avoid relying on official notice without documentary evidence, and especially so when making final rejections. Id., § 2144.03.A. For this reason, Applicant respectfully submits that the Examiner improperly designated the outstanding Office Action as final, and requests that the finality thereof be withdrawn.

The Examiner also characterized Applicant's statement that the smart card may store a public key of a CA as an admission that Murphy et al.'s smart card indeed stores a public key of a CA. Final Office Action, at 3. Applicant fails to see the logic in the Examiner's statement. Although any storage medium can store information such as a public key of a CA, the mere capability to store a piece of information cannot lead to the conclusion that a storage medium does indeed store the information. In fact, as Applicant pointed out, the authentication process of Murphy et al. does not require the use of a public key of a CA. Supra. There is thus no reason to believe the smart card would store the public key of the CA.

With regard to the second disagreement between the Examiner and Applicant, the Examiner pointed out that Murphy et al. teaches authenticating users using information stored on a smartcard, including certificates. Final Office Action, at 3. The Examiner then alleged that for the certificates to be used to authenticate users, the certificates themselves must be authenticated. Final Office Action, at 3-4.

Applicant notes that this line of arguments lacks logic. Certificates are used to authenticate other information or entities, but do not necessarily need to be

authenticated themselves. Murphy et al. certainly does not teach authentication of certificates. If the Examiner is taking official notice that certificates must always be authenticated, Applicant respectfully requests that the Examiner provide documentary support for such notice.

More importantly, the Examiner failed to appreciate the deficiency of Murphy et al. in that the authentication process of Murphy et al. does not require the use of a public key of a CA. Therefore, even assuming, arguendo, that the certificates are authenticated, Murphy et al. fails to teach or suggest, and in fact teaches away from, authenticating such certificates using a stored CA public key.

In view of the above, respectfully submits that Murphy et al. is deficient with regard to claims 1 and 38, and Ishibashi et al. fails to cure the deficiencies of Murphy et al. Furthermore, none of the other applied references compensate for the deficiencies of Murphy et al. and Ishibashi et al. Accordingly, Applicant incorporates all arguments presented in response to the previous Office Actions and respectfully requests that the Examiner withdraw all claim rejections and allow pending claims 1, 3-38, and 40-81.

If clarification of any of Applicant's arguments would be beneficial to the Examiner's consideration, Applicant invites the Examiner to contact the undersigned.

Please grant any extensions of time required to enter this response and charge

any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: January 9, 2009   By:_____

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